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ALCATEL FIT No. 103472 "Tailoring Surface of Slanted Bragg Gratings"

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### Abstract

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The present invention relates to a fiber grating filter optical waveguide device, comprising an optical fiber with an optical filter, both consisting essentially of silica, whereby said optical filter has an area with a grating region, wherein said area with a grating region is covered with a layer comprising a material having a refractive index which is the same or higher than the refractive index of the material of the optical fiber. The variation of the physic-chemical nature of said material allows to match the changes in the refractive index of the optical fiber of the optical filter when specific requirements for a high transmission spectrum of the filter are required.

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